

Field Report

Havasu National Wildlife Refuge

■ 1.0 Summary

Havasu National Wildlife Refuge (NWR) has limited potential for the introduction of Alternative Transportation Systems (ATS). Due to the Refuge's primary mission to conserve and protect the natural environment, visitation to the Refuge must be controlled to limit the number of visitors and their activities. Currently the number of visitors and the type of activities on the Refuge are not conducive to the requirements necessary to support ATS.

The primary facilities that support visitor activities at Havasu NWR include boat ramps, piers, and vehicle parking areas, which are located along a 24-mile stretch of the Colorado River. There is no focal point or specified route, such as a Visitor Center, where large numbers of visitors are concentrated in one location. One area the Refuge experiences high levels of visitation is personal powerboats on the Colorado River. This activity, which occurs primarily during summer weekends, could not be replaced by ATS.

The greatest potential for use of ATS at the Refuge would only occur after construction of a Visitor Center, or other similar facility with the potential to draw large numbers of visitors in one location. A shuttle providing nature observation tours of the Refuge, starting and ending at the Visitor Center, would be feasible if visitation reach high enough levels to support such a system.

■ 2.0 Background Information

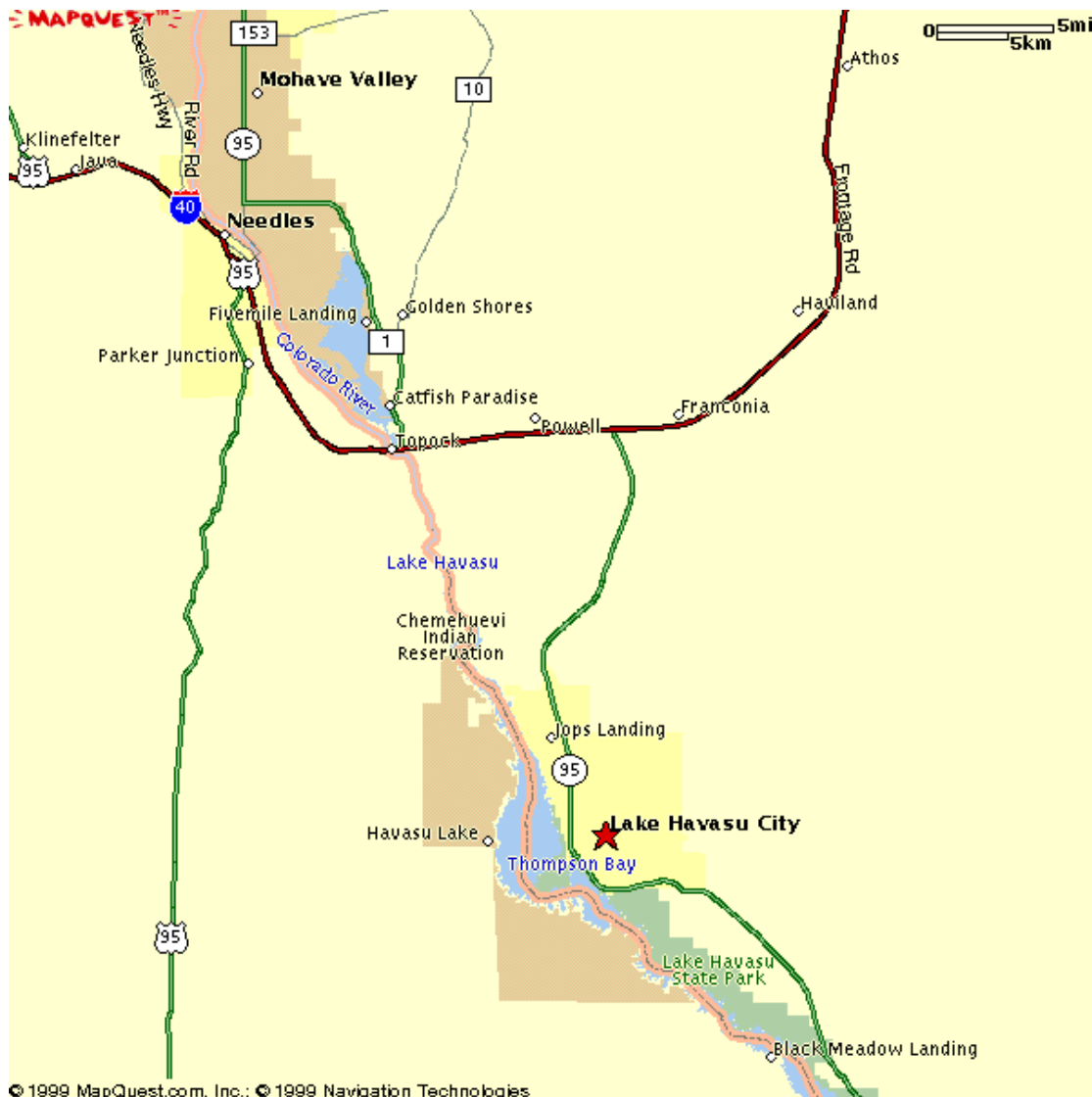
2.1 Location

The Havasu NWR is located along the Arizona and California sides of the lower Colorado River. It extends 24 miles between Needles, California and Lake Havasu City, Arizona (refer to Figure 1). Most of the Refuge is located in Mohave County, Arizona along the east side of the Colorado River. The Refuge adjoins lands belonging to the Fort Mojave Indian Tribe, the BLM, and the Chemehuevi Indian Tribe. Interstate 40 runs through the Refuge, dividing it into the Topcock Marsh area to the north and the Topcock Gorge and Needles Wilderness sections to the south. South of Interstate 40, a portion of the Refuge is located along the west bank of the Colorado River in Riverside County, California.

Access to facilities in the Topcock Marsh section of the Refuge is provided from State Route 95 via Exit 1 of Interstate 40. Access to facilities south of Topcock Gorge is provided

from London Bridge Road via State Route 95 in Lake Havasu City. In addition, the Atchison Topeka and Santa Fe Railroad tracks run from Needles, California through the Refuge along the north side of Interstate 40.

Figure 1. Site Map



2.2 Administration and Classification

Havasu NWR is under the jurisdiction of the USFWS, Department of the Interior. The Refuge was created in 1941 under the administration of President Franklin D. Roosevelt to protect wildlife resources within the areas created by the opening of Parker Dam. The Refuge headquarters is located in Needles, California. The Refuge Manager is Mr. Gregory Wolf.

2.3 Physical Description

The Havasu NWR contains 38,427 acres of marsh, lake, and riverine habitat, of which approximately 17,606 acres have been designated as Wilderness. The Colorado River and its backwaters provide over 300 miles of shoreline within the Refuge. Along the east bank of the Colorado River to the north of Interstate 40, a Levee Road runs approximately 15 miles through the Refuge and connects with Topcock Road (State Route 95). An unpaved road runs from Levee Road across the South Dike to State Route 95 along the eastern portion of the Refuge. This is a two-lane paved road that runs from Interstate 40 south of the Marsh to Bullhead City, approximately 10 miles to the north.

The major sections of Havasu NWR are described below.

Topcock Marsh

Topcock Marsh consists of a 4,000-acre marsh north of Interstate 40, which is fed by a four-mile inlet canal from the Colorado River. The Pintail Slough is located in the northern tip of the marsh area and the inlet canal. The marsh section contains three areas with boat ramp and vehicular parking (North Dike, Five Mile Landing, Catfish Paradise). Access to these facilities is provided by State Route 95.

- **North Dike and Pintail Slough** contain a boat ramp, seven duck/goose-hunting blinds, and an unpaved parking area. Use of the boat ramp and parking areas are free, but visitors are charged \$10.00 per day to use the hunting blinds. Equestrian trails are also located around the periphery of this area.
- **Five Mile Landing** contains a privately operated concession with a 20-year lease to provide temporary trailer spaces for camping, tackle, boat rental, docks, and grocery items. The lease agreement allows for overnight camping and parking of trailers and campers on the 74-trailer site.
- **Catfish Paradise** contains a handicapped-accessible boat ramp, restroom facilities, and an unpaved parking lot.
- **Levee Road** runs along the western edge of the Topcock Marsh section of the Refuge. This road provides access to the Refuge Farm and also access for day-use visitors that park along the road to fish and swim off beaches on the eastern banks of the Colorado River.

Topcock Gorge

Topcock Gorge is a scenic narrow canyon that stretches 16 miles along the Colorado River south of Interstate 40. Castle Rock, located along the River's east bank in the southern portion of the Gorge, provides a site to set or remove canoes from the River.

Needles Wilderness

Needles Wilderness includes 14,606 acres designated as Wilderness located to the east of the Topcock Gorge. This section is characterized as an upland desert ecosystem containing sparse desert vegetation. There is very little public use of the Wilderness area since there is no vehicular accessibility. Any permitted public uses must meet the legal mandates of the Wilderness Act.

South of Topcock Gorge

Narrow bands of land run along both sides of the Colorado River south of the Topcock Gorge. Mesquite Bay (Phases I and II) are located in the southeastern portion of the Refuge and contain pier facilities, restrooms, and paved parking lots.

2.4 Mission and Goals of the Wildlife Refuge

Havasu NWR was established on January 22, 1941, as a refuge and breeding ground for migratory birds and other wildlife. Havasu NWR is part of the National Wildlife Refuge System (the System) of lands federally-owned and managed primarily for the conservation of wildlife. As stated in the Refuge Manual, the System mission is:

“To provide, preserve, restore, and manage a national network of lands and waters sufficient in size, diversity, and location to meet society’s needs for areas where the widest possible spectrum of benefits associated with wildlife and wild lands is enhanced.”

2.5 Visitation Levels and Visitor Profile

The visitor profile for the Refuge differs by time of year. Visitors from northern states, escaping cold winters (referred to as snowbirds), mainly visit the Refuge from October through March. Activities of these visitors primarily include fishing, hunting, canoeing, and wildlife observation. During the summer months and especially on weekends, visitors to the Refuge consist primarily of families from southern California and Arizona who generally stay in Lake Havasu City, Arizona or Needles, California. Activities of the summer visitors primarily include active water sports such as speed boating, jet skiing, fishing, swimming, and canoeing. There is a limited amount of horseback riding by persons who live near the Refuge, primarily during the months from October through March.

Current surveys have not been conducted to determine the number of annual visitors. Estimates reported in the 1994-2014 Comprehensive Management Plan (CMP), indicated there were 566,354 visitors to the Refuge in 1989. Although figures are not available to provide support, it is anticipated that visitation has increased along with the population of the southern Colorado River region over this period, at approximately 20 percent.

■ 3.0 Existing Conditions, Issues and Concerns

3.1 Transportation Conditions, Issues and Concerns

Refuge roads are not congested and can handle the current number of Refuge visitors. Even during peak periods, the parking facilities are not fully used. Improvements to the road network to facilitate increased visitation are not required. Large numbers of visitors to the Refuge would be difficult to monitor and manage. It would likely lead to a degradation of the natural resources that the Refuge was established to protect.

The major form of congestion experienced at the Refuge is from personal powerboats, especially during summer holiday weekends. The most congested area of the Refuge is at Blankenship Bend, a large sandbar in the Colorado River where people from boats congregate to party and socialize. There are safety concerns when visitors operate powerboats intoxicated and cause environmental damage when they leave trash on the sand bar or in the River.

Commercial tour boat services shuttle people from Lake Havasu City to Laughlin, Nevada. This service would likely expand as tourist facilities in both Lake Havasu City and Laughlin, Nevada expand. Tour boat shuttles travel the Colorado River portion of the Refuge, but generally do not stop in the Refuge and do not pose any significant impacts to the Refuge.

Figure 2. New Boat Ramp and Pier Facilities at Mesquite Bay



3.2 Community Development Conditions, Issues and Concerns

Havasu NWR is located to the north of Lake Havasu City, Arizona, one of the fastest growing communities in Mohave County, which is also the most rapidly growing county in Arizona. The tourism industry associated with the Colorado River is an economic generator for the region. The employment base for these communities has been shifting from primarily government and agricultural employment to a service-oriented economy. This shift is intended to meet the growing needs of recreational users along the Colorado River.

Bullhead City, located 10 miles to the north of the Refuge, is experiencing significant population increases due the proximity of the new gambling resort in Laughlin, Nevada. Lake Havasu City, also experiencing significant population growth, is seeking to improve facilities to increase tourism opportunities. The City, for example, will soon begin construction of a bikeway linking the center of the city to the River. Further expansion of the bikeway system is planned, including paths along the River and a path along State Route 95 to Interstate 40.

Havasu NWR receives wide and varied year-round visitation. This complicates the mission of the Refuge (to protect resources) and requires a significant level of law enforcement. Law enforcement patrols are conducted frequently by Refuge personnel, but with limited staff and resources, the Refuge requires the support of law enforcement personnel from Lake Havasu City.

Golden Shores, a year-round community comprised primarily of retired persons, is located adjacent to the eastern boundary of the Topcock Marsh. Residents from this community are frequent visitors to the Refuge. In the past, this community has been supportive of the Refuge, and has contributed to maintaining and cleaning up the Refuge. The Golden Shores Marina at the south end of the Topcock Marsh is an encroachment of the Refuge. It encompasses several hundred square feet where boats have been allowed to moor for the marina. In lieu of a formal lease agreement, this activity has been addressed by “special use permit” over the past several decades.

3.3 Natural or Cultural Resource Conditions, Issues and Concerns

Annual flooding and movements of the River destroyed evidence of long-term habitation or village sites. The native tradition of this region is primarily defined through modern ethnography and historic accounts. Cultural sites on the Refuge consist of prehistoric rock art sites, ground images known as geoglyphs, rock alignments and clearings, dance patterns, cairns, trails, and sparse scatters of pottery shards.

Over 300 species of birds, 42 species of mammals and 38 species of reptiles have been recorded at the NWR. These include federally listed endangered and State-listed species:

- **Endangered Species** – Federally listed endangered species include the Yuma clapper rail, bald eagle, peregrine falcon, and two Colorado River native fishes (razorback sucker and bonytail chub).

Figure 3. Typical Boating and Parking Amenities at the Havasu NWR



- **State-Listed Species** – Five bird species, listed as either endangered or threatened by the states of California and Arizona, are located on the Refuge: California black rail, southwestern willow flycatcher, snowy egrets, Arizona Bell’s vireo, and yellow-billed cuckoo.

3.4 Recreation Conditions, Issues and Concerns

With a primary objective of preserving and protecting the natural environment, recreational activities on the Refuge must be limited to levels that can be sufficiently monitored and controlled to prevent negative impacts to the environment. Large numbers of Refuge visitors would conflict with the refuge’s primary mission – to protect wildlife resources.

Recreational activities on the Refuge can be classified into three categories:

- **Interpretation** – Colorado River wildlife tours are conducted in canoes by private contractors at Topcock Gorge. In addition, tours are conducted on foot within the northern portion of the designated wilderness areas.
- **Wildlife-Oriented Recreation** – Hunting of migratory birds (duck and goose) is permitted on the Refuge during the month of October. In addition, dove, quail, and rabbit hunting also occur primarily in the fall. Fishing is the most popular activity, which primarily occurs in the spring and fall. Topcock Marsh is the primary fishing area.

- **Nonwildlife-Oriented Recreation** – Nonwildlife-oriented recreational activities are discussed below.
 - **Camping** – The Five Mile Landing concession is the only permitted camping area on the Refuge.
 - **Equestrian** – Horseback riders are primarily from the surrounding community and use trails in the Pintail Slough area.
 - **Water Sports** – The primary recreation activities during the summer months include swimming, speed boating, water skiing, jet skiing, tubing, and sun bathing. Weekends are peak periods for these activities, especially the three summer holiday weekends – Memorial Day, Fourth of July, and Labor Day. Canoeing is also a popular activity in spring, summer, and fall months.
 - **Off-Road Vehicles** – Although not permitted on the Refuge, off-road vehicles are often caught trespassing on the Refuge, especially during the winter months.

■ 4.0 Planning and Coordination

4.1 Unit Plans

In the early 1990s, a Comprehensive Management Plan (CMP) has been prepared by the USFWS and the Bureau of Reclamation to develop objectives for the four national wildlife refuges, including Havasu, in the lower Colorado River. This plan identified objectives concerning visitation and access to the Refuge. The purpose is to ensure only compatible and appropriate activities occur on the Refuge and to regulate activities that are potentially harmful to Refuge resources. Key relevant objectives from the CMP are identified below.

- Reduce levels of nonwildlife-oriented recreation on national wildlife refuges by strengthening enforcement and educational outreach efforts;
- Reduce levels of nonwildlife-oriented recreation on the River channel that runs through the lower Colorado River refuges, eliminate all nonwildlife-oriented recreation that is not *compatible*, increase the quality experience related to natural values by all River visitors, and raise public awareness of the lower Colorado River ecosystem values; and
- Consider, with more detailed public use strategy development, the improvement of wildlife observation opportunities by adding an auto tour route with appropriate interpretive materials and signage in appropriate locations.

4.2 Public and Agency Coordination

The Refuge coordinates with a variety of public agencies in the region. These agencies include the Bureau of Reclamation (responsible for operating and maintaining the channel

that passes through Havasu NWR), Arizona Game and Fish Department (responsible for enforcing existing conservation laws), and the BLM (responsible for managing public lands in the western United States, including the Parker Strip Special Recreation Management Area located south of Lake Havasu City and Parker Dam). In addition to these State and Federal agencies, the Refuge Manager maintains close contact with the Lake Havasu City policy-makers and has input concerning land use changes in areas that could affect the Refuge.

■ 5.0 Assessment of Need

5.1 Magnitude of Need

There is limited need for an alternative transportation system to provide access to the Refuge. The number of visitors and type of recreational activities would not be conducive to an ATS. In addition, the recreational activities generally require the use of personal boats or other equipment, and are dispersed throughout the Refuge, making ATS less feasible. As identified in the CMP (refer to Section 4.1), a major objective of the Refuge is to reduce impacts to natural resources. Growth in visitation and the number of nonwildlife-oriented recreational activities on the Refuge would reduce the ability to monitor and control visitor use, resulting in greater impacts to natural resources.

5.2 Feasible Alternatives

Based on the overall objectives of the Refuge, there are no short-term ATS alternatives.

A Visitor Center for the Refuge is planned, but a site has not been identified. The Visitor Center could help educate the public about the Refuge and become a focal point, resulting in a concentration of visitors. A long-term ATS solution would be to provide an excursion shuttle from the Visitor Center through the Refuge. The tours would need to be conducted in an environmentally non-obtrusive vehicle that limits noise and emissions.

■ 6.0 Bibliography

U.S. Fish and Wildlife Service/U.S. Bureau of Reclamation, Comprehensive Management Plan Summary, Lower Colorado River National Wildlife Refuges: Havasu National Wildlife Refuge, Bill Williams River National Wildlife Refuge, Cibola National Wildlife Refuge, Imperial National Wildlife Refuge, 1994-2114.

U.S. Fish and Wildlife Service/U.S. Bureau of Reclamation, Final Environmental Assessment and Comprehensive Management Plan Summary, Lower Colorado River National Wildlife Refuges: Havasu National Wildlife Refuge, Bill Williams River National

Wildlife Refuge, Cibola National Wildlife Refuge, Imperial National Wildlife Refuge, 1994-2114.

<http://southwest.fws.gov/refuges/arizona/havasus.html>

■ 7.0 Persons Interviewed

Mike McGill, Assistant Refuge Manager, Havasu National Wildlife Refuge

Bruce William, City Manager, Lake Havasu City, Arizona

Kevin Murphy, Public Works Director, Lake Havasu City, Arizona